

[0061] Referring to FIG. 4C, in a state where the sliding unit 300 rotates by '90°,' the second display unit 210 can be positioned in parallel to the lower surface 401 of the hinge is coupler 400, and one end 211 of the second display unit 210 is in a contact state with one end 111 of the first display unit 110.

[0062] FIG. 5A, FIG. 5B and FIG. 5C are exemplary views illustrating a sliding unit 300 of the mobile terminal rotates by '180°,' and FIG. 6A and FIG. 6B illustrate examples of screen output of the first display unit 110 and the second display unit 210 according to a use state in the mobile terminal of FIGS. 1A and 1B.

[0063] FIG. 5A sequentially illustrates a state when the sliding unit 300 rotates by '180°,' FIG. 5B illustrates a state when the sliding unit 300 rotates by about '145°,' FIG. 5C illustrates a state when the sliding unit 300 rotates by '180°.'

[0064] When the sliding unit 300 starts to rotate by '90°,' the sliding unit 300 can rotate about the first hinge portion 410, and as shown in FIG. 5B, one end 211 of the second display unit 210 can rotate together with the sliding unit 300 in a contact state with one end 111 of the first display unit 110. As described above, when a user wants to perform a general use such as communication and character message transmission, the sliding unit 300 can be positioned by rotating by about '145°.' In this example, as shown in FIG. 6A, a display controller (not shown) can control the first display unit 110 to output a touch keypad 112 including numerals, characters, and special symbols and can control the second display unit 210 to output various information 212 such as a menu, image, and moving picture.

[0065] Referring to FIG. 5C, in a state where the sliding unit 300 rotates by '180°,' one end 211 of the second display unit 210 can contact with one end 111 of the first display unit 110, and a surface of the first display unit 110 and a surface of the second display unit 210 become in a same plane. As shown in FIG. 6B, because it is necessary for a user to use a wide screen in order to perform Internet web browsing, when using a wide display unit A, the sliding unit 300 is can be positioned by rotating by '180°.' In this example, the display controller can control to extend an output screen 113 such as Internet web page to a full screen of the wide display unit A by connecting the first display unit 110 and the second display unit 210.

[0066] When the sliding unit 300 rotates in an opposite direction from a rotated state by '180°,' the second display unit 210 can be positioned parallel to a lower surface 401 of the hinge coupler 400, as shown in FIG. 5C, and because one end 211 of the second display unit 210 is in a contact state with one end 111 of the first display unit 110, the sliding unit 300 cannot rotate about the first hinge portion 410 and can first rotate about the first hinge portion 410. In this example, as shown in FIG. 5B, one end 211 of the second display unit 210 can rotate together with the sliding unit 300 in a contact state with one end 111 of the first display unit 110. If the sliding unit 300 further rotates in an opposite direction in a state of '90°' shown in FIG. 4C, the sliding unit 300 can rotate based on the first hinge portion 410. In this example, one end 211 of the second display unit 210 can receive interference from the hinge coupler 400, whereby the folder unit 200 can perform a sliding movement in an insertion direction (first direction) D1 into the inside of the sliding unit 300 and thus is finally in a state of FIG. 4B.

[0067] As described above, in the mobile terminal 1 according to the exemplary embodiments, as the folder unit 200 can perform a sliding movement, the second display unit 210 of the folder unit 200 can be positioned adjacent to the first display unit 110 of the main body 100, and thus the wide

display unit A can be provided and a size of a display area can be easily adjusted according to user settings. Further, as the folder unit 200 can perform a sliding movement according to a rotation of the sliding unit 300, the second display unit 210 can be positioned to adjacent to the first display unit 110, a structure of the mobile terminal 1 can be simplified, and the mobile terminal 1 can entirely formed in a small size, thereby satisfying portability of the mobile terminal 1 while providing a wide display unit for supporting an Internet web browsing function.

[0068] As described above, by enabling a folder unit to perform a sliding movement, as a second display unit of a folder unit can be positioned adjacent to a first display unit of a main body, a wide display unit can be provided such that a size of a display area can be easily adjusted according to user settings.

[0069] Further, as a folder unit can perform a sliding movement according to a rotation of a sliding unit, the second display unit can be positioned adjacent to the first display unit such that a structure of the mobile terminal can be simplified, and an entire size of the mobile terminal can be minimized.

[0070] Further, mobility of the mobile terminal while providing a wide display unit for supporting an Internet web browsing function can be satisfied.

[0071] It will be apparent to those skilled in the art that various modifications and variations can be made in the present invention without departing from the spirit or scope of the invention. Thus, it is intended that the present invention cover the modifications and variations of this invention provided they come within the scope of the appended claims and their equivalents.

What is claimed is:

1. A mobile terminal comprising:

- a main body having a first display unit;
- a folder unit having a second display unit provided opposite to the first display unit;
- a sliding unit connected to a portion of the folder unit to guide slide movement of the folder unit; and
- a hinge coupler to connect the sliding unit and the main body such that the sliding unit rotates based on the main body,

wherein the second display unit locates adjacent to the first display unit according to the slide movement of the folder unit toward the main body, the folder unit being opened by the sliding unit rotation based on the hinge coupler, and

a wide display unit is formed based on a surface of the first display unit and a surface of the second display unit formed in a single plane.

2. The mobile terminal of claim 1, wherein the hinge coupler comprises:

- a first hinge portion rotatably connected to a portion of the main body; and
- a second hinge portion rotatably connected to a portion of the sliding unit.

3. The mobile terminal of claim 2, wherein the folder unit performs a slide movement when the sliding unit rotates based on the second hinge portion.

4. The mobile terminal of claim 2, wherein the hinge coupler comprises:

- a first folder hinge connected to the first hinge portion to provide a resisting power when the sliding unit rotates based on the first hinge portion, and
- a second folder hinge connected to the second hinge portion to provide a resisting power when the sliding unit rotates based on the second hinge portion.